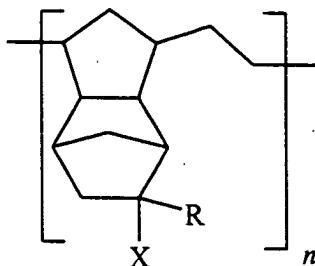


What is claimed is

1. A process for producing an optical film from a polyolefin of the formula



5

in which at every occurrence of the substituents R and X they are either both hydrogen or R is methyl and X is a polar group, and n is a number from 10 to 1000, by casting a solution of the polyolefin in an organic solvent onto a substrate and evaporating the solvent, characterized in that it encompasses the steps of

(i) dissolving the polyolefin in an organic solvent or solvent mixture,

(ii) casting the solution onto a smooth substrate in an atmosphere comprising at least 1% by volume of solvent vapor at a temperature below the boiling point of the solvent, with substantially laminar gas flow,

(iii) evaporating the solvent to obtain a self-supporting film, and

20 (iv) peeling the film away from the substrate and drying at a temperature rising to 70-140 °C, without any resultant orientation of the film.

25 2. The process as claimed in claim 1, characterized in that the organic solvent has been selected from the group consisting of dichloromethane, toluene, and cyclohexane, and also mixtures of these solvents.

30 3. The process as claimed in claim 2, characterized in that the organic solvent is dichloromethane, and the casting procedure takes place at a temperature not above 35 °C.

4. The process as claimed in any of claims 1 to 3,

characterized in that at least some of the substituents X are C₁₋₄-alkoxycarbonyl groups.

5. The process as claimed in claim 4, characterized in that at least some of the substituents X are methoxycarbonyl groups.
10. The process as claimed in any of claims 1 to 5, characterized in that the concentration of the polyolefin in the casting solution is from 20 to 35% by weight.
7. The process as claimed in any of claims 1 to 6, characterized in that the thickness of the film produced is from 30 to 200 μ m.